

Today's Topics:

455KHz IFs (continued..)
airport security
C programs for Ham Radio
QSLs and SASEs
Regency Monitorradio info needed.
Trend towards requiring SASEs for domestic QSLs?
Units of Measure (was flu

Date: Tue, 07 Nov 89 10:28:12 GMT

From: "Pete Lucas, NCS-TLC 0793-411613" <PJML@IBMA.NERC-WALLINGFORD.AC.UK

Subject: 455KHz IFs (continued..)

455KHz IF's - well in Europe, 470KHz seems to have been popular with the indigenous BC-band receiver-makers, but since most of these have now either gone bust or market Eastern imports badge-engineered, theres been a trend to 455KHz.

As has been said, there can be problems with images being received, despite the front-end selectivity (remember, the image is 2*the IF - this is typically a ratio in frequency terms of 2:1 from the 'intended' reception frequency. Even a poorly aligned ferrite loopstick antenna provides adequate image rejection in most cases).

Some of the early solid-state AM auto radios (Philco - as fitted to Ford cars in the late 'fifties) used an IF of about 235KHz. These radios often had 12-volt tubes for the frequency changer and used germanium transistors for the IF, and a single class 'A' power transistor for the audio output. This was convenient for the manufacturers since the early germanium transistors werent the gainiest of devices and high-frequency (over 500KHz) operation was fraught - you had to neutralise each stage independantly, and it changed with temperature! I remember using one of these auto radios as an 'IF strip' tuned to 1.6MHz behind a simple 2-stage tunable front-end (6AC7 rf amp, 6BA7 mixer, 12AT7 VFO) because having a 235KHz IF, it was that bit more selective than a radio using 455KHz.

Also, being an auto radio, it was well screened so pickup at the 'first IF' was never a problem.

>--Pete--<

Date: 7 Nov 89 05:18:05 GMT

From: sunybcslkitty!larry@boulder.colorado.edu (Larry Lippman)
Subject: airport security

In article <1948@dover.sps.mot.com>, waters@darla.sps.mot.com (Strawberry Jammer) writes:

> }Has it ever been verified that radios and hand held scanners, etc have
> }been responsible for some sort of electronic problems aboard an aircraft?
>
> Yes, the first time was a crash in the late 1930's when the LO of an FM
> reciever interferred with the navigation receivers ad a plane flew into a
> mountain. FM 88-108Mhz, LO=RCVD. Freq. + 10.7 or 98.7-118.8 Mhz The
> aviation navvigation band is roughly 108-118 Mhz (118-135 or so are used
> for voice). Even microwatts at close range (i.e. inside a metal shell) can
> cause intereference.

I'm sorry, but the scenario you have portrayed is bogus.

Commercial FM broadcasting did not begin until 1940, and the FM broadcast band so allocated by the FCC was 42 to 50 MHz. The present FM broadcast band of 88 to 108 MHz was not allocated until 1944, and did not see significant use until 1946 since prior to that time wartime materiel controls did not permit the manufacture of radio receivers for consumer use. Portable FM receivers did not see widespread manufacture until the late 1940's.

During the 1930's aircraft "navigation receivers" were essentially limited to the reception of beacons in the frequency range of 200 to 400 kHz, and the direction finding of said beacons and commercial radio stations in the overall frequency range of 200 to 1,600 kHz. Range receivers were also employed in the frequency range if 200 to 400 kHz, and relied upon the _aural_ detection of signals with "A" and "N" AFSK morse code to achieve a navigational reference.

The first commercial use of VHF for civilian aircraft navigation did not occur until 1939, when the "Z-marker" system was implemented on a frequency of 75 MHz. Z-marker receivers were intentionally NOT sensitive, and were designed for a sensitivity of 2,500 microvolts.

The use of VOR, and VHF localizer and glide slope apparatus for civilian aircraft did not begin until 1946.

If you have some specific details of this alleged "crash in the late 1930's", then please furnish them; if not, I am going to dismiss your story as an old wive's tale.

> Check Aviation Week for other examples.

Since you imply that such examples exist, perhaps you could furnish

us with a few. I am aware of the situation involving a cellular telephone in a baggage compartment which allegedly activated a fire detection system; I know of no others, however.

> The bottom line is that radio equipment on a commercial flight simply is a
> risky thing to do, even if the pilot knows about your transmitter/receiver
> there may well be another he DOESN'T know about. The consequences just to
> play games are just stupid.

I do not disagree that receivers and transmitting apparatus should not be used by a passenger on any commercial airline flight. The only reason that should concern anyone about WHY such use is prohibited is that it is unlawful since it violates a very specific FAR section.

My personal opinion is that it is improbable that local oscillator radiation from any commercially available receiver or receiver portion of a portable transceiver will cause any interference to any aircraft navigation apparatus in use today. The use of a transmitter, however, is a totally different matter, and could conceivably affect a variety of non-radio flight instrumentation and controls through RFI susceptibility.

However, debating this point is senseless unless one is attempting to convince the FAA to rescind the FAR which deals with the use of electronic apparatus by passengers on commercial aircraft. My personal opinion is that the FAR is just fine as it is, since surely any rational ham radio operator, aviation or scanner "enthusiast" can live without their radio for the short duration of an aircraft flight.

<> Larry Lippman @ Recognition Research Corp. - Uniquex Corp. - Viatran Corp.
<> UUCP {allegro|boulder|decvax|rutgers|watmath}!sunnybcs!kitty!larry
<> TEL 716/688-1231 | 716/773-1700 {hplabs|utzoo|uunet}!/ \uniquex!larry
<> FAX 716/741-9635 | 716/773-2488 "Have you hugged your cat today?"

Date: Mon, 6 Nov 89 21:50:53 EST
From: "Dave M. Dabay" (SGI|stay) <dabay@BRL.MIL>
Subject: C programs for Ham Radio

I am looking for c programs to port to a high performance workstation, thingsd like antenna propagation and beam heading, tv or graphics transmission, sattellite tracking, etc, etc,etc....
to call book address
dave N3FDG

Date: 6 Nov 89 16:46:40 GMT
From: hpda!hpcupt1!holly@uchvax.Berkeley.EDU (Jim Hollenback)
Subject: QSLs and SASEs

In the case of W3LPL, he does not operate the station during contests. He has some one else operate the station and the trick is to find out who the operator was and QSL to the operator. I am not sure W3LPL ever operates his station, probably just rents it to operators that like to run up a big score for some one. My experience with W3LPL has been nothing but negative. I worked the station and tried to get a card. Then one day I happened to work one of Frank's neighbors and he mentioned that Frank NEVER answers his mail and you have to QSL to the operator. I need a card from W3LPL for the CQ WW RTTY contest. Guess I will have to wait until the results are posted and try to get a card from the operator. I sent Frank a nice letter with a SASE asking the name of the operator, but of course he never bothered to reply. Wish we could start a movement where the big testers that do reply to QSL get there logs rejected and can not submit until the past due QSL's are mailed. Or maybe a column in QST where you can send in the list of stations that refuse to reply to SASE's so everyone can find out who does not reply so you wont bother working them. Sort'a like a DX manager's list, but for the stations that don't QSL.

73's
Jim, WA6SDM
holly@hpcupt1.hp.com

Date: 7 Nov 89 05:12:12 GMT
From: cs.utexas.edu!wuarchive!texbell!attctc!mic!rrm!ric@tut.cis.ohio-state.edu
(Ric Martin)
Subject: Regency Monitorradio info needed.

At the latest swap fest, I picked up one of these (without manuals or xtals) and want to use it to receive in the 137.00 satellite band. Does anyone have a manual they might part with? The formula for ordering xtals would get me started.

tnx

ric N5NHI

Date: 7 Nov 89 13:09:59 GMT
From: deimos.cis.ksu.edu!harris.cis.ksu.edu!mac@uunet.uu.net (Myron A. Calhoun)
Subject: Trend towards requiring SASEs for domestic QSLs?

In article <7120091@hpcupt1.HP.COM> holly@hpcupt1.HP.COM (Jim Hollenback) writes:
[many lines deleted]

>.... Personally I
>think it is a sad state of affairs when a ham can spend thousands of
>dollars on equipment, towers, antennas and the like and cant spend
>a \$100 a year on cards an postage.....

But all of us do ****NOT**** spend "thousands of dollars on equipment...."
My main HF rig is an old SWAN 350 (all tubes, analog dial); my backup
HF rig is a TCS-13 CW/AM bought "war surplus" straight from DoD for
\$12.51; my antenna is a longwire fed with open line (spell "cheap"); my
"towers" are an old power pole next to my house, a push-up TV antenna,
and a tree; and my 2-meter rig was the doorprize at a hamfest about 1983.
But I will QSL if someone says they need Kansas or my county.
--Myron
--

Myron A. Calhoun, PhD EE, W0PBV, (913) 532-6350 (work), 539-4448 (home).
INTERNET: mac@ksuvax1.cis.ksu.edu
BITNET: mac@ksuvax1.bitnet
UUCP: ...{rutgers, texbell}!ksuvax1!harry!mac

Date: Mon, 6 Nov 89 21:27:57 CST
From: rlwest@flop2.csc.ti.com (Bob West - WA8YCD - DSEG/HRD Computer Systems
Training - MSG HRD1 - 995-1908)
Subject: Units of Measure (was flu

Maybe the quantity to be measured is RELUCTANCE, not in an electromagnetic
connotation, but in the reluctance for people to give up what they've
grown up with in expressing themselves.

I'd almost be like someone coming in and saying YOU GOTTA SPEAK PIG-LATIN
FROM NOW ON! No matter it's better, more concise, more eloquent, more poetic,
etc., IT JUST AIN'T WHAT WE'RE USED TO.

I learned MKS and CGS and SI in physics... started in Jr. High School... and
can appreciate the value of them 'cause some of those values that are dealt
with are inconvenient in FPS... (What ***IS*** the speed of light in Furlongs per
Fortnight?)

I once tried to teach the metric system to my dad... looking back as the
frustration is now just memory, it was pretty funny.

I wonder if some of that RELUCTANCE is the force we've seen exhibited when
the FCC or someone suggests some change to the Amateur Radio Service? (For
example, the Novice License... Incentive Licensing... No-Code... whatever...)

Regardless of the pros and cons of any new idea, there is an almost tangible force opposing it.

Interesting observation, IMHO, about the nature of the critter H.Sapiens...

73,

Bob WA8YCD

/ Bob West WA8YCD	"I didn't know you were gonna do Social Studies!" \
RLWEST@FLOPN2.CSC.TI.COM	"Whaddya mean? That was Kirchoff's Law!"
WA8YCD@W5T00.TX.USA.NA	"Yeah! CURRENT Events!"
\	/

End of INFO-HAMS Digest V89 Issue #850
